CLAIMS

Sub A1

1. A method for identifying a presented individual, comprising:

determining a match between a presented image metric, representing at least one characteristic of a presented image of the presented individual, and a reference metric selected from a predetermined arrangement of a plurality of reference metrics, wherein each one of the plurality of reference metrics represents at least one reference characteristic of one of a plurality of known individuals; and

identifying the presented individual as one of the plurality of known individuals if a match is found between the presented image metric and one of the plurality of reference metrics.

2. The method of claim 1, further comprising arranging the predetermined arrangement based on the at least one characteristic of the presented image metric.

3. The method of claim 2, wherein the at least one characteristic of the presented image metric comprises a physical characteristic of the presented individual.

4. The method of claim 3, wherein the physical characteristic is selected from the group consisting of hair color, skin tone, and facial characteristic of the presented individual

5. The method of claim 3, wherein the at least one characteristic of the presented image metric comprises a characteristic of a presented iris of the presented individual.

6. The method of claim 1, further comprising arranging the predetermined arrangement based on a user-defined characteristic of each of the plurality of reference metrics.

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7. The method of claim 6, wherein the user-defined characteristic comprises a non-image-related characteristic of each of the plurality of known individuals.

8. The method of claim 7, wherein the non-image related characteristic is selected from a group consisting of geography, memberships, affiliations and individual habits.

9. The method of claim 1, further comprising arranging the predetermined arrangement as a selected subset of the plurality of reference metrics based on an ordered search of the database.

10. The method of claim 1, wherein the predetermined arrangement is based on a combination of the at least one characteristic of the presented image metric and a non-image-related characteristic of each of the plurality of known individuals.

11. The method of claim 1, further comprising arranging the predetermined arrangement based on a combination of a characteristic of a presented iris of the presented individual, another one of a physical characteristic of the presented individual and a non-image-related characteristic of each of the plurality of known individuals.

12. The method of claim 1, further comprising arranging the predetermined arrangement by binning the plurality of reference metrics based on the at least one reference characteristic of the plurality of known individuals such that reference metrics having similar reference characteristics are arranged in the same bin.

13. The method of claim 1, further comprising concurrently determining a match between a plurality of presented image metrics and the plurality of reference metrics, wherein each of the plurality of presented image metrics represents at least

one characteristic of a presented image of one of a plurality of presented individuals, and wherein the predetermined arrangement comprises a circular presentation of the plurality of reference metrics, and identifying each of the plurality of presented individuals as one of the plurality of known individuals if a match is found between one of the plurality of presented image metrics and one of the plurality of reference metrics.

14. The method of claim 1, wherein the presented image metric and each of the plurality of reference metrics are in a digital format that provides a substantially repeatable representation of the at least one characteristic of a presented image of the presented individual and the at least one reference characteristic of one of a plurality of known individuals, respectively.

15. The method of claim 1, wherein determining the match comprises identifying and comparing the at least one characteristic of the presented image metric with a corresponding characteristic of at least one of the predetermined arrangement of the plurality of reference metrics.

16. A method in a computer system for identifying a presented individual, comprising:

acquiring an image of at least a presented iris of the presented individual;

converting the image into a presented image metric, wherein the presented image metric represents at least one characteristic of the presented iris;

determining a match between the presented image metric and a selected one of a plurality of reference metrics in a predetermined arrangement from an reference metric database, wherein each of the plurality of reference metrics represent at least one characteristic of a reference iris of a known individual; and

identifying the presented individual as one of the plurality of known individuals if a match is found between the presented image metric and at least one of the predetermined arrangement of reference metrics.

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17. The method of claim 16, further comprising classifying the presented image metric based on the at least one characteristic of the presented iris, and wherein each reference metric within the predetermined arrangement has a corresponding classification for the at least one characteristic of the reference iris of the known individual.

18. The method of claim 16, wherein the predetermined arrangement of the plurality of reference metrics is based on at least one non-image-related characteristic of each of the plurality of known individuals.

19. The method of claim 16, wherein the predetermined arrangement is determined by dynamic binning of the plurality of reference metrics based on the at least one characteristic of the reference iris of the known individual.

20. The method of claim 20, wherein the predetermined arrangement of reference metrics comprises a subset of the plurality of reference metrics in the database.

21. The method of claim 20, wherein the reference metric further includes a user-defined characteristic, and further comprising selecting a subset of reference metrics from the plurality of reference metrics based on the user-defined characteristic.

22. The method of claim 16, wherein the predetermined arrangement of reference metrics comprises a circulating presentation of each of the plurality of reference metrics.

23. The method of claim 16, wherein the presented image metric and each of the plurality of reference metrics each respectively further represent at least one other physical characteristic of the individual.

24. The method of claim 16, wherein each of the plurality of reference metrics further represent a user-defined characteristic of the known individual.

25. The method of claim 16, further comprising formatting the presented image metric to further represent a plurality of characteristics of at least the presented individual, classifying at least one of the plurality of characteristics of the presented individual, formatting each of the plurality of reference metrics to further represent a plurality of characteristics of the known individual, and classifying at least one of the plurality of characteristics of each of the plurality of known individuals; and

comparing the presented image metric with at least one reference metric from a subset of the plurality of reference metrics to identify the presented individual, wherein the subset is determined by sorting each of the plurality of reference metrics by at least one predetermined classification corresponding to one of the plurality of characteristics of the presented image metric.

26. The method of claim 16, wherein identifying the presented individual further comprises:

measuring the degree of similarity between the presented image metric and a selected one of the plurality of reference metrics;

comparing the measured degree of similarity with a predetermined similarity threshold; and

identifying the presented individual as a specific one of the plurality of known individuals corresponding to the selected one of the plurality of reference metrics if the measured degree of similarity is equal to or greater than the predetermined similarity threshold.

27. A computer system for identifying a presented individual represented at least in part by presented image data, comprising:

a memory having a plurality of reference metrics, wherein each of the plurality of reference metrics represents a reference image of at least a portion of one of a plurality of known individuals, and wherein each of the plurality of reference metrics includes at least one classifiable reference characteristic of the reference image;

a processor in communication with the memory and operable to receive the presented image data, the processor operable to run a program to convert the presented image data to a presented image metric having at least one classifiable characteristic of the presented individual, the program further operable to retrieve at least a predetermined arrangement of the plurality of reference metrics, wherein the program generates an identification signal to identify the presented individual as one of the plurality of known individuals if a match is found between the presented image metric and one of the predetermined arrangement of reference metrics.

28. The system of claim 27, wherein the predetermined arrangement is based on the at least one classifiable characteristic of the presented image metric.

29. The system of claim 28, wherein the at least one classifiable characteristic of the presented image metric comprises a physical characteristic of the presented individual.

30. The system of claim 29, wherein the physical characteristic is selected from a group consisting of a facial characteristic, hair color, skin tone and an iris characteristic.

31. The system of claim 28, wherein the at least one classifiable characteristic of the presented image metric comprises a characteristic of a presented iris of the presented individual.

32. The system of claim 27, wherein the predetermined arrangement is based on a user-defined characteristic of each of the plurality of reference metrics.

33. The system of claim 32, wherein the user-defined characteristic comprises a non-image-related characteristic of each of the plurality of known individuals.

34. The system of claim 33, wherein the non-image-related characteristic is selected from the group consisting of a geographical characteristic, an affiliation characteristic and an individual habit characteristic.

35. The system of claim 27, wherein the predetermined arrangement is a selected subset of the plurality of reference metrics based on an ordered search of the plurality of reference metrics.

36. The system of claim 27, wherein the at least one classifiable characteristic of the reference image includes a non-image-related characteristic of each of the plurality of known individuals, and wherein the predetermined arrangement is based on a combination of the at least one classifiable characteristic of the presented image metric and the non-image-related characteristic of each of the plurality of known individuals.

37. The system of claim 27, wherein the predetermined arrangement is based on a combination of a characteristic of a presented iris of the presented individual, another one of a physical characteristic of the presented individual and a non-image-related characteristic of each of the plurality of known individuals.

38. The system of claim 27, wherein the predetermined arrangement comprises binning the plurality of reference metrics based on the at least one classifiable reference characteristic of the plurality of known individuals such that reference metrics having similar reference characteristics are arranged in the same bin.

39. The system of claim 27, further comprising a carousel program within the processor, wherein the carousel program is operable for concurrently determining a match between a plurality of received presented image metrics and the plurality of reference metrics, wherein each of the plurality of presented image metrics represents at least one characteristic of a presented image of one of a plurality of presented individuals, and wherein the predetermined arrangement comprises a circular presentation of the plurality of reference metrics, and wherein the carousel program generate an identification signal to identify each of the plurality of presented individuals as one of the plurality of known individuals if a match is found between one of the plurality of presented image metrics and one of the plurality of reference metrics.

40 The system of claim 27, further comprising a camera operable for capturing the presented image of the presented individual and outputting the presented image data representing the presented image.

41. The system of claim 27, further comprising a secure system having restricted access, wherein the identification signal is receivable by the secure system for determining access.

42. A computer system for identifying a presented individual, comprising:

a camera operable for capturing a presented image of the presented individual and outputting presented image data representing the presented image,

wherein the presented image includes a plurality of classifiable characteristics of the presented individual including a presented physical characteristics of the presented individual and at least one characteristic of a presented iris of the presented individual;

a reference image database having a plurality of reference metrics, wherein each of the plurality of reference metrics represents a reference image of at least a portion of one of a plurality of known individuals, and wherein each of the plurality of reference metrics includes a plurality of classifiable reference characteristics of the known individual including physical characteristics of the known individual, at least one characteristic of a reference iris of the known individual and at least one user-defined characteristic of the known individual;

a processor in communication with the memory and operable to receive the presented image data, the processor operable to run a program to convert the presented image data to a presented image metric having the plurality of classifiable characteristics of the presented individual, the program further operable to retrieve at least a predetermined arrangement of the plurality of reference metrics, wherein the program generates an identification signal to identify the presented individual as one of the plurality of known individuals if a match is found between the presented image metric and one of the predetermined arrangement of reference metrics.

43. The system of claim 42, wherein the predetermined arrangement is based on binning each of the plurality of reference metrics based on at least one of the plurality of classifiable characteristics of the reference metric such that the ones of the plurality of reference metrics having similar classifiable characteristics are arranged in the same bin.

44. The system of claim 42, wherein the predetermined arrangement comprises a circular presentation of the plurality of reference metrics.

45. The system of claim 42, wherein the predetermined arrangement is a selected subset of the plurality of reference metrics based on an ordered search of the database based on one of the plurality of classifiable characteristics of the presented image metric.

46. The system of claim 42, wherein the predetermined arrangement is a selected subset of the plurality of reference metrics based on an ordered search of the database based on one of the presented physical characteristics of the presented individual.

47. The system of claim 42, wherein the predetermined arrangement is a selected subset of the plurality of reference metrics based on an ordered search of the database based on at least one characteristic of the presented iris of the presented individual.

48. The system of claim 42, wherein the predetermined arrangement is a selected subset of the plurality of reference metrics based on an ordered search of the database based on at least one of the user-defined characteristics of the known individual.